

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

THE UNITED STATES OF AMERICA,

v.

ROMAN STORM, ET AL.,

Defendants.

Case No. 23 Cr. 430 (KPF)

Final Pretrial Conference: July 8, 2025

DEFENDANT ROMAN STORM'S
MOTIONS *IN LIMINE*
RE GOVERNMENT'S NOTICED AND UNNOTICED EXPERTS (11-14)

Brian E. Klein
Keri Curtis Axel
Becky S. James
Kevin M. Casey
Viviana Andazola Marquez
Waymaker LLP
515 S. Flower Street, Suite 3500
Los Angeles, California 90071
(424) 652-7800

David E. Patton
Nicholas D. Pavlis
Hecker Fink LLP
350 Fifth Ave, 63rd Floor
New York, New York 10118
(212) 763-0883

Attorneys for Roman Storm

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I. PRELIMINARY STATEMENT

Defendant Roman Storm respectfully submits this memorandum in support of the following motions *in limine* to:

- A. MIL No. 11: Exclude the testimony of Phillip Werlau because he does not qualify as an expert on the subjects of his proposed testimony, offers irrelevant speculations, uses unreliable data and methodologies to arrive at his conclusions.
- B. MIL No. 12: Exclude the testimony of Stefan George, IRS-CI Special Agent, because his proposed testimony is only relevant, if at all, to forfeiture, which is not at issue in this phase of trial, and is in any event prejudicial;
- C. MIL No. 13: Limit the testimony of Joel DeCapua, FBI Special Agent, to non-hearsay matters, and since there are none, his testimony should be excluded entirely; and
- D. MIL No. 14: Exclude the testimony of John Pisa-Relli, Senior Law Enforcement Coordinator, Office of Foreign Assets Control (“OFAC”), and any other government witnesses who are “lay witnesses” improperly offering expert opinions.

For the reasons discussed below, this Court should not permit the government to offer such witness testimony at Mr. Storm’s upcoming trial pursuant to Federal Rules of Evidence 701 (governing lay witness testimony), 702 (governing expert testimony under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and its progeny), 703 (governing the bases of an expert’s opinion), and 704 (governing an expert’s opinion on an ultimate issue). To the extent this Court finds the proposed testimony complies with those Rules, this Court should nevertheless preclude or limit such testimony under Federal Rules of Evidence 401, 402, and 403.

II. LEGAL STANDARD

A. Requirements to Testify as an Expert Pursuant to Federal Rule of Evidence 702, *Daubert*, and its Progeny

Expert testimony must satisfy Rule 702 as interpreted by *Daubert v. Merrell Dow Pharmaceuticals, Inc.* and its progeny. 509 U.S. 579 (1993). Under Rule 702, a “witness who is

qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion” if it is more likely than not that:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert’s opinion reflects a reliable application of the principles and methods to the facts of the case.

Fed. R. Evid. 702. District courts play a “gatekeeping role” to “ensur[e] that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert*, 509 U.S. at 597-80. The party seeking to introduce and rely on expert testimony bears the burden of establishing that the proposed expert and his or her testimony meet the requirements of Rule 702 by a preponderance of the evidence. *Id.* at 592-93, n. 10; *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007).

Crucially, in order for an expert to be qualified to testify on a particular subject under Rule 702, their “training and experience” must be “closely related to the area to the proposed testimony.” *S.E.C. v. Tourre*, 950 F. Supp. 2d 666, 674 (S.D.N.Y. 2013). As such, “[a]n expert who is qualified in one field cannot offer an opinion about aspects of the case in another field for which she is not qualified.” *Arista Records LLC v. Lime Group LLC*, 2011 WL 1674796, at *2 (S.D.N.Y. May 2, 2011) (internal citations omitted)). District courts also must “ensure[] that expert witnesses will not testify about lay matters,” *In re Rezulin Prods. Liability Litig.*, 309 F. Supp. 2d 531, 541 (S.D.N.Y. 2004), and not “usurp either the role of the trial judge in instructing the jury as to the applicable law or the role of the jury in applying that law to the facts before it.” *United States v. Lumpkin*, 192 F.3d 280, 290 (2d Cir. 1999) (internal citation omitted).

Because Rule 702 mandates that the proffered expert testimony be “the product of reliable principles and methods” and that it “reflect[] a reliable application of the principles and

methods to the facts of the case,” a district court is not required “to admit opinion evidence that is connected to [the facts] only by the *ipse dixit* of the expert.” *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997); *see also United States v. Mrabet*, 2023 WL 8179685, at *2 (S.D.N.Y. Nov. 27, 2023) (holding expert opinion based merely on expert’s “training, education, and experience” constituted “a patent evasion of the Rule’s requirements”). Thus, “when an expert opinion is based on data, a methodology, or studies that are simply inadequate to support the conclusions reached, *Daubert* and Rule 702,” *Amorgianos v. National Railroad Passenger Corp.*, 303 F.3d 256, 266 (2d Cir. 2002) mandate the testimony “be excluded if it is speculative or conjectural.” *Boucher v. U.S. Suzuki Motor Corp.*, 73 F. 3d 18, 21 (2d Cir. 1996).

Finally, a district court assessing a proposed expert’s testimony under Rule 702, “should also be mindful of other applicable rules.” *Daubert*, 509 U.S. at 595. For example, Rule 703, limits an expert to base “an opinion on facts or data in the case that the expert has been made aware of or personally observed” unless other experts in the same field “reasonably rely on those kinds of [not personally observed] facts or data in forming an opinion on the subject.” Fed. R. Evid. 703. Likewise, Rule 704 forbids “expert opinions in a criminal case that are about a particular person (‘the defendant’) and a particular ultimate issue (whether the defendant has ‘a mental state or condition’ that is ‘an element of the crime charged or of a defense’).” *Diaz v. United States*, 602 U.S. 526, 534 (2024) (quoting Fed. R. Evid. 704(b)).

B. Excluding Improper Lay Witness Testimony Pursuant to Federal Rule of Evidence 701

A district court may also preclude a lay witness from testifying if the testimony does not meet the three requirements under Rule 701. “It is the proponent of lay opinion testimony who must satisfy the rule’s three foundation requirements.” *United States v. Garcia*, 413 F.3d 201, 211 (2d Cir. 2005).

First, Rule 701(a) “requires that lay opinion testimony be both (a) based on the witness’s first-hand perceptions and (b) rationally derived from those first-hand perceptions.”¹ *United States v. Kaplan*, 490 F.3d 110, 119 (2d Cir. 2007). In other words, “opinion testimony of lay witnesses must be predicated upon concrete facts within their own observation and recollection—that is facts perceived from their own senses, as distinguished from their opinions or conclusions drawn from such facts.” *Id.* (citing *United States v. Durham*, 464 F.3d 976, 982 (9th Cir. 2006) (internal quotation marks omitted)).

Second, the proposed lay opinion must be “helpful to clearly understanding the witness’s testimony or to determining a fact in issue.” Fed. R. Evid. 701(b). “Rule 701’s helpfulness requirement is designed to provide ‘assurance[] against the admission of opinions which would merely tell the jury what result to reach.’” *U.S. v. Rea*, 958 F.2d 1206, 1215 (2d Cir. 1992).

Third, the proposed lay opinion must “not [be] based on scientific, technical, or other specialized knowledge within the scope of Rule 702.” Indeed, “[t]he purpose of Rule 701(c) is ‘to eliminate the risk that the reliability requirements set forth in Rule 702 will be evaded through the simple expedient of proffering an expert in lay witness clothing.’” *U.S. v. Natal*, 849 F.3d 530, 536 (2d Cir. 2017) (quoting *Bank of China, N.Y. Branch v. NBM LLC*, 359 F.3d 171, 181 (2d Cir. 2004)).

C. Excluding or Limiting Otherwise Qualified Expert Testimony under the Federal Rules of Evidence 401, 402, and 403

Even if the proposed testimony complies with Rules 701-704, witness testimony may still be limited or excluded under Rules 401-403. Under Rules 401 and 402, the evidence offered by

¹ Of course, Federal Rule of Evidence 602 also requires that a “witness may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter.” Fed. R. Evid. 602. The test “is whether a reasonable trier of fact could believe the witness had personal knowledge.” *Folio Impressions, Inc. v. Byer California*, 937 F.2d 759, 764 (2d Cir. 1991) (citations omitted).

an expert witness must be relevant and not otherwise prohibited by the “Constitution; a federal statute; [the Federal Rules of Evidence], or other rules prescribed by the Supreme Court.” Fed. R. Evid. 401 and 402. Further, under Rule 403, a district court may exclude relevant evidence if “its probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” Rule 403 plays a “uniquely important role . . . in a district court’s scrutiny of expert testimony, given the unique weight such evidence may have in a jury’s deliberation.” *Nimely v. City of New York*, 414 F.3d 381, 397 (2d Cir. 2005).

III. ARGUMENT

A. **MIL No. 11: The Testimony of Phillip Werlau Should Be Excluded Because He Does Not Qualify as an Expert on the Subjects of His Proposed Testimony, Offers Irrelevant Speculation, and Uses Unreliable Data and Methodology**

The government has designated Philip Werlau as an expert to testify regarding various aspects of “blockchain technology, smart contracts, and internet applications.” (*See* Ex. 1 at 1.) As part of his proposed testimony, Mr. Werlau intends to “provide an overview of the Tornado Cash service as it existed from its inception in 2019 through in or about August 8, 2022,” (*id.* ¶ 6), including, *inter alia*, certain changes to the protocol that were purportedly made to “monetize [Tornado Cash’s] technology” (*id.* ¶ 15); the alleged impact of such changes on “the market demand for [TORN] tokens” (*id.* ¶ 16); and the feasibility and effectiveness of implementing “know-your-customer” or “KYC” functions in Tornado Cash (*id.* ¶¶ 18-19). Mr. Werlau also intends to offer testimony on whether certain deposits allegedly involving funds associated with particular criminal incidents were made using the user interface (“UI”) or the command line interface (“CLI”), based on his analysis of the “gas limit” and “gas ratio” for those transactions. (*Id.* ¶¶ 22-23; *see also* Ex. 2, ¶ 3.)

Mr. Werlau, who is not a college graduate, lacks any substantive education in these topic areas, and his training and experience with Web3 and blockchain technology are largely limited to self-study efforts he engaged in *after* he decided to hold himself out as an expert in these areas. He also purports to offer opinions concerning decentralized finance (“DeFi”) protocols and the economics of cryptocurrency tokens (“tokenomics”), areas in which he has no expertise whatsoever. Because Mr. Werlau has insufficient experience in blockchain technology and lacks *any* meaningful experience in DeFi and tokenomics, he is not qualified to offer the opinions contained in his disclosure and should be precluded from doing so.

Even if this Court finds Mr. Werlau is qualified in certain areas, the scope of his testimony should be limited to his disclosed areas of expertise and must remain within the bounds of the Federal Rules of Evidence. Mr. Werlau’s proposed testimony is so broad-ranging that he purports to offer all kinds of speculation about purported design choices that the developers could have made to implement Know-Your-Customer (“KYC”) features into the UI developed by Peppersec, Inc. (“Peppersec”). However, Mr. Werlau is not a KYC expert and has no experience whatsoever in implementing Bank Secrecy Act regulations. For example, in his initial disclosure, Werlau propounds, among other things:

- “The service ***could also have been changed to implement KYC processes***, which would also have the effect of enabling more effective sanctions screening by providing information about who the customer initiating the deposit or withdrawal was.”² (Ex. 1 ¶ 19.)

² Setting aside that what “could have” been done and the supposed effectiveness of that hypothetical conduct are both speculative, the statement is also highly misleading, illustrating the prejudice of permitting government witnesses to simply parrot the government’s invented term “service.” The statement suggests unequivocally that the “service” could have been changed, but in fact there can be no debate that it was impossible to impose any new features on the Tornado Cash smart contracts. *See Van Loon v. Dep’t of the Treasury*, 122 F.4th 549, 569 (5th Cir. 2024) (“Tornado Cash has no control over these immutable smart contracts. It cannot change the code, delete the code, or remove the code from the Ethereum blockchain network. In other words,

- “The *changes* to the Tornado Cash service in February 2022 also demonstrate that the Tornado Cash founders could have included a [KYC] function in the Tornado Cash service. . . . This hypothetical smart contract could have been set up so that the Tornado Cash founders . . . had the ability to add or remove users based on a KYC process.” (*Id.* ¶ 18).

Mr. Werlau should be precluded from speculating in areas where he has absolutely no expertise, including his proposed testimony on: (i) the impact that certain updates increased the “market demand” for TORN tokens; (ii) purported efforts to monetize Tornado Cash; and (iii) the feasibility and effectiveness of implementing KYC functions in Tornado Cash.

In addition, the numerous opinions throughout Mr. Werlau’s report about what he believes that Mr. Storm “could have” done are wholly irrelevant. It is undeniable that Mr. Storm and his colleagues could have developed an entirely different product. But whether they could have done so is not a question for the jury. This is not a civil negligence lawsuit. It is a criminal case about what Mr. Storm actually did and with what state of mind. The many “could have” opinions should be precluded as irrelevant and in violation of Rules 401 and 403.

Furthermore, this Court should preclude testimony by Mr. Werlau regarding his “gas ratio” analysis, as his methodology is untested, has not been subject to peer review, has no known error rate, and has not been generally accepted by the scientific community. Finally, this Court must preclude any testimony that states a legal conclusion or otherwise intrudes upon the traditional province of the jury in finding the facts and applying the law to them.

Tornado Cash cannot “unplug” the immutable smart contracts. Even if the Tornado Cash developers did not want North Korea, the Lazarus Group, or anyone else, for that matter, using the immutable smart contracts that they created, Tornado Cash—let alone the Department—would be powerless to stop them.”). Thus, the government’s attempt to sweep other auxiliary features into the umbrella of the “Tornado Cash service” threatens to unfairly prejudice Mr. Storm and to mislead the jury in violation of Rule 403.

1. This Court Should Preclude Mr. Werlau from Testifying on Blockchain Technology and Tokenomics Because He Lacks Sufficient Experience and Knowledge under Rule 702 and *Daubert* and its Progeny

This Court should preclude Mr. Werlau’s proposed testimony regarding the operations and functions of Tornado Cash because he lacks sufficient qualifications to offer opinions on DeFi protocols, much less tokenomics issues such as market drivers of tokens.

Mr. Werlau does not appear to hold a college degree, or any relevant certifications in the areas of computer science, software programming, or blockchain technology—nor has he published any papers or articles or had any speaking engagements on blockchain technology or cryptocurrencies, much less on DeFi applications. He has not testified or otherwise been qualified as an expert in any other cases. Mr. Werlau’s disclosures and his curriculum vitae (“CV”) show he has insufficient experience to offer expert opinion testimony on “blockchain technology” and “smart contracts,” much less on DeFi protocols such as Tornado Cash. His CV characterizes him as an “investigator,” “cybersecurity analyst,” and “software engineer,” who currently holds a position as a “senior investigator” at AnChain.AI. (Ex. 3 at 1.) Mr. Werlau has worked at AnChain.AI for just over four years, where his work appears to be almost entirely forensic analysis and law enforcement support (rather than smart contract development). None of his experience before AnChain.AI involved cryptocurrencies or blockchain technology. In his current position, which he has held for less than six months, he has apparently “[s]upported government agencies and private customers in complex smart contract investigations and “[l]ed smart contract and cryptocurrency training for government agencies,” but neither his CV nor his disclosures specify the nature of the support or training he has provided. (*Id.*) In Mr. Werlau’s previous position as an “engineering manager,” he led “the design and development of Web3SOC,” which is described, without any additional details, as “an application used for Web3

incident response.” (*Id.*; Ex. 1 at 1.) And in his first position with AnChain.AI—which began less than four years ago—Mr. Werlau started as a “threat intelligence analyst.” The only relevant work he has done, beginning in or about late 2021, appears to have been leading the development of an unnamed “Ethereum non-fungible token (NFT) platform and associated web storefront, where he developed multiple smart contracts as well as the web-based user interface and the back-end system that supported the platform.” (Ex. 1 at 1.) There is no indication in Mr. Werlau’s CV that this experience involved any work on DeFi protocols.

In other words, Mr. Werlau has all of four years of experience in the general field of cryptocurrency and blockchain technology, and in that time, he has worked on the development of two blockchain-related applications, only one of which appears to actually run on a blockchain (the NFT platform).

Under Rule 702, a witness’s qualifications to render his or her opinions is a “‘threshold question’ to be resolved prior to the other inquiries.” *523 IP LLC v. CureMD.Com*, 48 F. Supp. 3d 600, 642 (S.D.N.Y. 2014) (citing *Nimely*, 414 F.3d at 396 n.11). “The initial question of whether a witness is qualified to be an ‘expert’ is important, among other reasons, because an ‘expert’ witness is permitted substantially more leeway than ‘lay’ witnesses in testifying as to opinions that are not ‘rationally based on [his or her] perception[.]’” *Nimely*, 414 F.3d at 397 n.11. “When deciding whether an expert is qualified to render opinion testimony, the court must take into consideration the expert’s ‘background and practical experience,’ by looking at the ‘totality of the expert’s qualifications.’” *523 IP LLC*, 48 F. Supp. 3d at 642 (quoting *McCulloch v. H.B. Fuller Co.*, 61 F.3d 1038, 1043 (2d Cir. 1995); *Tiffany (NJ) Inc. v. eBay, Inc.*, 576 F. Supp. 2d 457, 458 (S.D.N.Y. 2007)).

Courts must also “compare the area in which the witness has superior knowledge, education, experience, or skill with the subject matter of the proffered testimony.” *United States v. Tin Yat Chin*, 371 F.3d 31, 40 (2d Cir. 2004). Indeed, one district court found that even a professor who had taught “graduate level courses in corporate finance, investments and financial engineering” and had published papers on various topics within those areas was not sufficiently qualified to present an opinion on the structure of collateralized debt obligations (“CDO”) because he had “no education, expertise, or experience in this area.” *Tourre*, 950 F. Supp. 2d at 676-77. That district court precluded his testimony even after acknowledging that he had previously testified regarding “damages in securities cases (including a CDO case).” *Id.* at 676; *see also In re Mirena IUD Products Liab. Litig.*, 169 F. Supp. 3d 396, 439 (S.D.N.Y. 2016) (excluding proposed expert who was a “biomedical engineer” with “experience in certain biomaterials and implants” but without “relevant experience or expertise in hormonal contraception”).

Given his dearth of experience, this Court should preclude Mr. Werlau from testifying on any of the topics listed in his disclosures. In *Zaremba v. General Motors Corp.*, the Second Circuit characterized the district court’s analysis of proposed expert testimony regarding an alternative, safer design for the roof of a car as “almost superfluous” in light of the witness’s “meager qualifications,” given he “had only a bachelor’s degree in engineering and his only practical experience was in designing parts for automobile air bags” before becoming a litigation consultant. 360 F.3d 355, 360 (2d Cir. 2004). The Second Circuit has upheld the preclusion of expert witness testimony where the proposed expert “lacked sufficient credentials in his purported field of expertise” because his “experience as a marketer in the beverage industry did not qualify him to testify on contract negotiations.” *Nora Beverages, Inc. v. Perrier Grp. of Am.*,

Inc., 164 F.3d 736, 746 (2d Cir. 1998). Finally, as discussed above, the district court in *Tourre* precluded testimony from a professor who had extensive experience testifying in the areas of corporate finance and financial engineering because he lacked specialized knowledge, expertise, or training in CDOs. 950 F. Supp. 2d at 678. Indeed, the district court there noted that while the proposed witness did “appear to have expertise in the general area of structured finance,” “that is so broad a category as to become meaningless when particularized here to synthetic CDOs, a very specific type of security.” *Id.*

Similarly, here, Mr. Werlau’s mere four years of experience in the general areas of “blockchain technology” and “smart contracts,” with no formal degrees or certifications, no publications or speaking engagements, and limited practical experience in designing blockchain-based applications, do not qualify him as an expert in the operations of Tornado Cash, a DeFi protocol that is “the subject matter of the proffered testimony.” *Tin Yat Chin*, 371 F.3d at 40. Instead, Mr. Werlau appears to have gained what little relevant experience he has from this prosecution, further undermining his qualifications. *See, e.g., In re Mirena Ius Levonorgestrel-Related Products Liab. Litig. (No. II)*, 341 F. Supp. 3d 213, 240 (S.D.N.Y. 2018), *aff’d sub nom. In re Mirena IUS Levonorgestrel-Related Products Liab. Litig. (No. II)*, 982 F.3d 113 (2d Cir. 2020) (“In determining whether the witness has the relevant experience, courts consider factors including the degree to which that experience was developed for the litigation.”); *Mancuso v. Consol. Edison Co. of N.Y.*, 967 F. Supp. 1437, 1443 (S.D.N.Y. 1997) (“We cannot help but conclude that [the expert] was not in fact an expert . . . when he was hired by plaintiffs, but that he subsequently attempted, with dubious success, to qualify himself as such by a selective review of the relevant literature.”). Mr. Werlau is simply not qualified to offer any opinions on a complex DeFi protocol like Tornado Cash, and this Court should preclude him from doing so.

2. This Court Should Preclude Mr. Werlau from Offering Speculative Testimony on Topics Outside the Scope of His Purported Expertise

Even if this Court finds that Mr. Werlau is qualified to offer expert opinion testimony, he should be precluded from offering speculative opinions that relate to topics outside the scope of his purported expertise in blockchain technology and smart contracts pursuant to Rule 702.

(a) Mr. Werlau Is Not Qualified to Offer Testimony on the “Market Demand” for TORN Tokens and Offers No Reliable Data in Support

Given the government’s own characterization of Mr. Werlau’s qualifications, this Court should preclude Mr. Werlau from opining on how certain changes to Tornado Cash created “increased market demand for [TORN] tokens.” (Ex. 1 ¶ 16.) ““An expert qualified in one subject matter does not thereby become an expert for all purposes. Testimony on subject matters unrelated to the witness’s area of expertise is prohibited by Rule 702.”” *523 IP LLC*, 48 F. Supp. 3d at 642 (quoting *Malletier v. Dooney & Bourke, Inc.*, 525 F. Supp. 2d 558, 642 (S.D.N.Y. 2007)). Mr. Werlau does not seek to be qualified as an expert on the economics of cryptocurrency tokens. (*See* Ex. 3 at 1.) For good reason: he does not have any relevant experience related to the valuation of cryptocurrency tokens or what features of a blockchain protocol may impact the value of such tokens. (*Id.*) Nor does he have any experience in the areas of economics or asset valuation more generally. (*Id.*) There is simply no basis for a witness who characterizes himself as an “investigator,” “cybersecurity analyst,” and “software engineer,” to credibly offer reliable testimony on such topics, and this Court should not permit him to do so. (*Id.* at 1.)

Even if this Court were to find that Mr. Werlau is somehow qualified to opine on the “market demand for [TORN] tokens,” his opinions on that topic should be precluded because they are “not supported by either sufficient facts or data, on the one hand, or reliable principles

and methodology, on the other hand.” *Fantasia Distribution, Inc. v. Cool Clouds Distribution, Inc.*, 693 F. Supp. 3d 335, 354 (E.D.N.Y. 2023) (precluding expert testimony for such failure). Rule 702 requires that “expert testimony rest on ‘knowledge,’ a term that ‘connotes more than subjective belief or unsupported speculation.’” *In re Rezulin Prods. Liability Litig.*, 309 F. Supp. 2d 531, 543 (S.D.N.Y. 2004) (quoting *Daubert*, 509 U.S. at 590); *see also* 523 IP LLC, 48 F. Supp. 3d at 643 (“In order to be admissible, ‘[a]n expert opinion requires some explanation as to how the expert came to his conclusion and what methodologies or evidence substantiate that conclusion.’”) (quoting *Riegel v. Medtronic, Inc.*, 451 F.3d 104, 127 (2d Cir. 2006), *aff’d on other grounds*, 552 U.S. 312 (2008)).

Mr. Werlau intends to offer testimony that certain changes to the Tornado Cash protocol made in February 2022 “served to increase the value of TORN tokens in two ways,” namely by: (1) “creating increased market demand” for TORN; and (2) purportedly creating “an ongoing revenue stream by staking TORN tokens in the Governance smart contract, where they would receive a share of the commissions earned from the relayers.” (Ex. 3 at ¶ 16.) But Mr. Werlau’s assessment that the February 2022 updates to the Tornado Cash protocol impacted the “market demand” for TORN is not supported by any facts or data reflecting demand for TORN in the market or even the price of TORN tokens during the relevant period—he simply observes that requiring a relayer to purchase TORN would increase demand for TORN without offering any data that could support such a conclusion, or any analysis of whether there *was*, in fact, an actual market impact. (*Id.*) Similarly, he states that purchasers of TORN would “receive a share of the commissions earned from relayers” in a purported “ongoing revenue stream” (by which he appears to be referring to a reward for staking TORN in the governance contract). This claim is unsupported by any analysis or methodology for determining how the existence of such rewards

actually impacted the value of TORN. (*Id.*) Indeed, rewards for staking TORN elsewhere—for example, in a separate liquidity pool unrelated to the Governance contract—could have been higher. In the absence of any evidence or an actual methodology, Mr. Werlau’s conclusion is nothing more than unsupported speculation. Given there are simply no facts or data to support the *actual* impact that the February 2022 Tornado Cash updates had on the price of TORN aside from Mr. Werlau’s speculation and conjecture, Mr. Werlau should not be permitted to offer testimony on this point. *See Rezulin*, 309 F. Supp. 2d at 543.

(b) Mr. Werlau Is Not Qualified to Offer Testimony on Purported Efforts to Monetize Tornado Cash, Which Is in Any Event, Speculative, Unreliable, and Unduly Prejudicial

Mr. Werlau intends to offer testimony that certain changes to what he calls “the architecture of the Tornado Cash service” in or around February 2022 “created a new way for the Tornado Cash service to monetize its technology.” (Ex. 1 ¶ 15.) For multiple reasons, he should be precluded from offering this testimony under Rule 702, *Daubert* and its progeny, and Rule 403.

As a threshold matter, and as discussed above, Mr. Werlau should not be permitted to offer testimony characterizing the Tornado Cash smart contracts and related applications as a “service.” Mr. Werlau’s proposed testimony illustrates that the use of such a legally-loaded term, unsupported in fact in the DeFi industry, runs afoul of Federal Rule of Evidence 702, as it “does not *aid* the jury in making a decision, but rather attempts to substitute the expert’s judgment for the jury’s.” *Rezulin*, 309 F. Supp. 2d at 541 n.23. It also runs afoul of Rule 403, as such a characterization would be unduly prejudicial, confuse the issues, and mislead the jury. *See 523 IP LLC*, 48 F. Supp. 3d at 644 (“The Rule 403 inquiry is particularly important in the context of expert testimony, ‘given the unique weight such evidence may have in a jury’s deliberations.’”) (quoting *Nimely*, 414 F.3d at 397). Thus, to the extent Mr. Werlau is permitted

to offer testimony regarding the Tornado Cash smart contracts and related applications, he should not be permitted to characterize them collectively as a “service.”

However he characterizes the various features of the Tornado Cash protocol, Mr. Werlau should be precluded from offering testimony regarding purported efforts to “monetize” it. Monetization of blockchain technology is an extremely complex topic, about which real experts have opined extensively in publications grounded in serious research. To reliably offer an opinion about monetization one must have *some* training or background in economics, finance, or business analytics of *some sort*. Mr. Werlau has nothing approaching that sort of expertise. Indeed, Mr. Werlau is not seeking to be qualified as an expert on the monetization of blockchain protocols or cryptocurrency projects. (Ex. 3 at 1.) Even if he is qualified as an expert in the general areas of “blockchain technology” and “smart contracts,” Mr. Werlau does not have any relevant experience on the monetization of such technology, much less on the monetization of DeFi protocols specifically. *See Tourre*, 950 F. Supp. 2d at 678. And, as discussed above, the extent to which the Tornado Cash protocol was run as a “service” or business is one of the ultimate issues in this case; while the government may present other witnesses who may testify regarding efforts to monetize what the government seeks to characterize as a “service,” permitting Mr. Werlau to do so would run afoul of Rule 403 as it would be unfairly prejudicial and confuse the issues for the jury. *See Nimely*, 414 F.3d at 397. This Court should thus preclude Mr. Werlau from offering testimony on purported efforts to “monetize” Tornado Cash.

(c) Mr. Werlau Is Not Qualified to Offer Testimony on the Feasibility of Implementing KYC Functions, Which Is in Any Event Speculative, Unreliable, and Unduly Prejudicial

Mr. Werlau intends to offer testimony regarding the feasibility of implementing “a know-your-customer (“KYC”) function in the Tornado Cash service,” which he contends would have had “the effect of enabling more effective sanctions screening.” (Ex. 1 ¶¶ 18-19.) As with his

proposed testimony regarding efforts to monetize Tornado Cash, Mr. Werlau is not qualified under Rule 702 to opine on KYC matters and his opinion regarding the purported effectiveness of a hypothetical KYC function is speculative, unreliable, and unduly prejudicial weighing against admission under Rule 403.

Mr. Werlau neither has experience in, nor is he seeking to be qualified as an expert on, the area of KYC or anti-money laundering (“AML”) matters more generally. (*See* Ex. 3 at 1.) Again, even assuming he is qualified as an expert in the general areas of “blockchain technology” and “smart contracts,” Mr. Werlau does not have any expertise in KYC or AML matters and cannot offer testimony regarding the feasibility or effectiveness of enabling KYC functions in those contexts. In fact, he does not appear to have experience implementing such functions in *any* context, and he does not cite any academic or other source upon which he could base his opinion regarding the feasibility or effectiveness of implementing such functions in the context of a DeFi protocol. He “simply has no specialized knowledge, expertise, or training” in this topic and should be precluded from offering testimony on it. *See Tourre*, 950 F. Supp. 2d at 677.

Even if this Court were to find that he is somehow qualified to opine on KYC matters, Mr. Werlau’s testimony regarding the hypothetical effect of a hypothetical KYC function should be precluded because he does not explain how he came to his conclusion or “what methodologies or evidence substantiate that conclusion.” *523 IP LLC*, 48 F. Supp. 3d at 643. Instead, Mr. Werlau intends to offer impermissible testimony about all the ways the Tornado Cash developers, who he calls “founders,” “could have” designed a feature differently to incorporate KYC functions, asserting, *ipse dixit*, that “the Tornado Cash founders could have included a know-your-customer (‘KYC’) function” and that doing so was a simple matter of updating the

relevant smart contracts, purportedly resulting in “more effective sanctions screening” because there would be more information about the customer initiating the deposit or withdrawal. (*See* Ex. 1 ¶¶ 18-19.) He claims “the Tornado Cash founders *could also have* implemented a new smart contract with a registry of authorized users, and *could have* programmed the Router to call that smart contract to check that the deposit address and/or withdrawal address were included on that list.” (*Id.* ¶ 18 (emphasis added).) Yet he does not explain *how* his proposed “registry of authorized users” would exist in the context of a DeFi application in which users maintain control over their assets at all times. (*Id.* ¶ 18.) Nor does he explain what methodologies or evidence substantiate his conclusion that “[e]mbedding compliance tools” in the (vague) manner he proposes “would have made it more difficult for Tornado Cash customers to evade” what he characterizes, prejudicially, as “the minimal sanctions screening that was added to the UI in April 2022.” (*Id.* ¶ 19.³) Tellingly, Mr. Werlau does not offer a single example of a DeFi protocol that has implemented a KYC function in the various ways he speculates “could have” been done here. In short, he makes no effort to explain his methodologies or what evidence substantiates his conclusions regarding the feasibility and effectiveness of implementing KYC functions, and his testimony on that topic must be precluded.

In all events, Mr. Werlau’s testimony regarding what measures or technology the Tornado Cash developers “could have” implemented should be precluded as not relevant and

³ Notwithstanding his disparagement of the Chainalysis Oracle (the sanctions screening tool added to Peppersec’s UI), Mr. Werlau claims the “founders *could have* embedded this sanctions screen into the smart contract architecture of the service” and “could have” changed the protocol “to implement a call by the Tornado Cash Router to the Chainalysis Sanctions Oracle or to implement other sanctions screening mechanisms,” without specifying what those other mechanisms are. (*Id.* (emphasis added).)

otherwise inadmissible under Rule 403.⁴ As an initial matter, these hypotheticals are not probative of Mr. Storm’s individual intent with respect to the alleged money laundering conspiracy—*i.e.*, whether he joined the alleged conspiracy “*knowing* that the transaction [was] designed in whole or in part...to conceal or disguise the nature, the location, the source, the ownership, or the control of the proceeds of specified unlawful activity.” 18 U.S.C. § 1956(a)(1)(B)(i) (emphasis added). Such hypotheticals might be relevant to a negligence theory of money laundering, but as the government conceded in its opposition to Mr. Storm’s motion to dismiss, “mere negligence would not amount to a Section 1956 violation.” (*See* Dkt. 53 at 44.). Accordingly, testimony regarding what anti-money laundering measures the Tornado Cash developers “could have” implemented lacks any probative value in the context of the money laundering conspiracy charged here. Instead, such testimony would risk confusing the issues and misleading the jury because AML and KYC functions reflect technical regulatory obligations that would distort the actual elements the government must prove. For example, evidence that Mr. Storm “could have” implemented KYC or AML functions may improperly lead the jury into equating the absence of such measures on the Tornado Cash protocol with Mr. Storm’s guilt on Count One, conspiracy to commit money laundering. Accordingly, these hypothetical statements from Mr. Werlau should be precluded.

⁴ Mr. Werlau’s report is chockfull of such hypotheticals. (*See, e.g.*, Ex. ¶ 6(b) (“Because the UI and the CLI generated the note, they *could have* been initially designed to store the note in a centralized location in a manner that was accessible to the operators of the Tornado Cash service.”); *id.* ¶ 18 (“[T]he Tornado Cash founders *could have* included a know-your-customer (“KYC”) function in the Tornado Cash service.”); *id.* ¶ 19 (“[T]he Tornado Cash founders *could have* embedded this sanctions screen into the smart contract architecture of the service, but did not do so.”) For the avoidance of doubt, the defense moves to preclude Mr. Werlau from advancing any such statements in his testimony as not relevant, or in the alternative because their “probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, [and/or] misleading the jury.” *See* Fed. R. Evid. 403.

Finally, as with his proposed testimony regarding the market demand for TORN, to the extent that Mr. Werlau intends to offer testimony regarding the effectiveness of implementing KYC functions into Tornado Cash based on the simple proposition that “requiring a user to give their personal information would make it easier to obtain information about the user,” such testimony should be precluded as a “lay matter[] which a jury is capable of understanding and deciding without the expert’s help,” *Mulder*, 273 F.3d at 104, and in recognition of the “unique weight” expert testimony may have in a jury’s deliberations. *Nimely*, 414 F.3d at 397.

3. This Court Should Preclude Mr. Werlau from Offering Testimony Regarding the Comparative Usage of Peppersec’s UI and CLI Based on a “Gas Ratio” Analysis That Appears to Have Been Largely Conducted By Someone Else

Mr. Werlau’s proposed testimony based on his “gas ratio” analysis does not meet the requirements under Rules 702, 703, and *Daubert* and its progeny, and this Court should exclude any testimony based on this methodology. In exercising its gatekeeping role under *Daubert*, district courts should consider four factors bearing on the reliability of expert testimony: whether a theory or technique “can be (and has been) tested[,]” (2) “whether the theory or technique has been subjected to peer review and publication[,]” (3) a technique’s “known or potential rate of error,” and “the existence and maintenance of standards controlling the technique’s operation[,]” and (4) whether a particular technique or theory has gained “general acceptance” in the relevant scientific community. *Daubert*, 509 U.S. at 593-94. None are met here. Moreover, the underlying work that the government discloses appears to have been performed not by Mr. Werlau at all, but by another individual, Marshall Yale, a cryptocurrency investigator at a firm named Blocktrace.

Mr. Werlau intends to offer testimony regarding the purported percentage of users who deposited Ethereum Tokens (“ETH”) into Tornado Cash through Peppersec’s UI versus the CLI,

based on his novel and untested “gas ratio” method. (Ex. 1 ¶ 22.) Using this same methodology, he also intends to offer testimony on whether Peppersec’s UI or CLI was used for certain deposits associated with particular criminal incidents identified by another of the government’s proposed expert witnesses, FBI Special Agent Joel DeCapua. (*Id.* ¶ 23.) Specifically, Mr. Werlau intends to offer testimony on whether particular deposits to Tornado Cash were made using Peppersec’s UI or CLI based on his analysis of the “gas limits” and the “gas ratios” of such transactions. (Ex. 1 ¶¶ 22, 23.) The “gas limit” refers to the “amount of gas” that “an address initiat[ing] a transaction on the Ethereum blockchain” communicates “it is willing to use to complete the transaction. (*Id.* ¶ 22.) The “gas ratio” refers to the ratio between the gas limit and the actual amount of gas that was used for the transaction. (*Id.*) Mr. Werlau claims that “both the UI and CLI have distinctive identifying characteristic gas limits and gas ratios that are visible on the blockchain” and that, based on his analysis of such data, approximately 96.2% of ETH deposits on the Ethereum blockchain from September 1, 2020 to August 8, 2022 used Peppersec’s UI, and approximately 2.8% of ETH deposits” during the same period “used the CLI.” (*Id.*) In his Rebuttal, Mr. Werlau included a document entitled “Gas Analysis Methodology” to “set forth in more detail” his methodology. (*See* Ex. 4.) Mr. Werlau also states that he “checked his methodology by reviewing certain Tornado Cash deposits where the person making the deposits has informed the government that he used Peppersec’s UI, and confirmed that these deposits were attributed to that UI by his methodology.” (Ex. 4 ¶ 3.) Notwithstanding his belated attempt to shore up the deficiencies of his prior disclosure, Mr. Werlau’s “gas ratio” analysis should be rejected because it relies on a methodology that is untested, has not been subject to peer review, has no known error rate, and has not been generally accepted by the scientific community.

First, Mr. Werlau’s gas ratio analysis has not been sufficiently tested under *Daubert*. Although he includes the single line in his Rebuttal in which he claims to have “checked” his methodology, the entire body of supporting facts or data produced with either of Mr. Werlau’s disclosures suggesting he “checked” his methodology is a spreadsheet containing a mere 12 transactions “where the person making the deposits has informed the [g]overnment that he used the UI.” (Ex. 2 ¶ 3.) Mr. Werlau does not disclose who the “person making the deposits” was, how many such deposits were made, how that person used Peppersec’s UI, which version of the UI that person used, and whether that person also tried making deposits through the CLI or any of the other available ways to make a deposit. Nor does he provide any documentation to confirm that this unidentified person did, in fact, use Peppersec’s UI, relying instead on statements provided by the government without corroboration. More importantly, Mr. Werlau makes no attempt to explain how these 12 transactions created in two days in January 2022 are sufficient to validate the methodology he used to attribute approximately *140,000 transactions* spanning a nearly *two-year period* during which, as Mr. Werlau admits, the “distinctive characteristics” he relied on “changed over time” to Peppersec’s UI. (Ex. 1 ¶ 22.)

Mr. Werlau also fails to apply his methodology consistently to the transactions he identified. In his initial disclosure, Mr. Werlau asserted that Peppersec’s “UI and the CLI both originally had a fixed gas limit in their computer code,” which he used to attribute deposit transactions between September 2020 and March 2021 as having been made via Peppersec’s UI. (*Id.*) But he also attributed deposit transactions which did *not* use a “fixed gas limit” during that same period to Peppersec’s UI; perhaps in recognition of this error, Mr. Werlau used his “rebuttal” disclosure to correct this deficiency and altered his analysis to attribute those same transactions to an “unknown” method. (*See* Ex. 4 at 9.)

Second, Mr. Werlau does not claim that his gas ratio methodology has been subjected to peer review or has been published anywhere. Indeed, there is no indication that his proposed methodology—or *any* similar methodology—has ever been used to determine whether certain transactions were made through the user interface of a DeFi protocol, a CLI, or by directly interacting with the protocol.

Third, Mr. Werlau does not disclose any known or potential rate of error, and fails to articulate any standards controlling the technique’s operation. Indeed, in the Description section of his “Gas Analysis Methodology,” he discloses: “It is possible that a user not using the CLI or UI sets a gas limit value that happens to fall into the range of determined UI and CLI values. Therefore, this should be considered an approximation to try to quantify the UI and CLI usage.” (Ex. 4 at 1.) Yet Mr. Werlau does not attempt to describe any evaluation of known or potential error rates for this “approximation,” and he does not give any consideration to other methods by which “a user not using the CLI or UI” would create a transaction that “happens to fall into the range of determined UI and CLI values.” (*Id.*) Instead, Mr. Werlau simply “simulates” the expected gas usage and gas limit of transactions created with Peppersec’s UI and CLI using “custom code” that was also not produced with his supplemental disclosure (Ex. 2 ¶ 3) and then contradicts the methodology he supposedly relied on by concluding that *every* transaction matching those characteristics during the relevant period was created with Peppersec’s UI or CLI.

Fourth, there is no indication that Mr. Werlau’s “gas ratio” analysis has gained “general acceptance”—or, indeed, any acceptance at all—in the scientific community focused on cryptocurrency and blockchain technology. As noted above, there is no indication that his gas ratio or similar methodology has been used to analyze transactions with a DeFi protocol.

Finally, this highly technical and untested analysis appears to have been performed not by Mr. Werlau at all but by another consultant that was not disclosed as an expert. The defense has analyzed the metadata attached to the “Gas Analysis Methodology” document, which was provided along with Mr. Werlau’s rebuttal disclosures to explain his gas analysis methodology, and the metadata indicates that the document was both created and last saved by an individual named Marshall Yale on or about March 12, 2025—the same day the government provided the document as part of its rebuttal disclosures. (*See* Ex. 5 ¶ 14.⁵) Marshall Yale is likely a cryptocurrency investigator at the firm Blocktrace. (*See id.* ¶ 18 n.5.) The same is true of several other documents provided by the government in support of Mr. Werlau’s analysis—all appear to have been created or last saved by Mr. Yale, with no indication that anyone named Philip Werlau or associated with the company AnChain.AI worked on those documents. (*See id.* ¶¶ 15-18, 22.) In sum, because Mr. Werlau’s proposed gas ratio methodology is untested, has not been subject to peer review, has no known error rate, and has not been generally accepted by the scientific community, and, indeed, he apparently did not even do the work himself, this Court should preclude him from providing any testimony based on such methodology.

This Court should exclude the proposed testimony of Mr. Werlau because he has insufficient experience in blockchain technology and smart contracts and lacks *any* relevant experience in DeFi protocols, token economics, or KYC functions. Even if this Court finds that Mr. Werlau is qualified to testify on “blockchain technology” and “smart contracts” generally, his proposed testimony on the specific topics identified above should be precluded because his

⁵ Exhibit 5 is the declaration of Thomas Kiernan, which is being offered solely for the purpose of this motion to exclude Mr. Werlau’s testimony under *Daubert* and its progeny, and Mr. Kiernan is not expected to testify at trial. To the extent this Court denies Mr. Storm’s motion to exclude Mr. Werlau’s proposed testimony, the defense reserves its right to call Mr. Kiernan to testify regarding Mr. Werlau’s supporting materials.

conclusions are not based upon reliable data and methodologies. Finally, this Court should preclude Mr. Werlau from offering any testimony based on his purported gas ratio methodology, which does not meet any of the four factors bearing on the reliability of expert testimony under *Daubert* and its progeny.

B. MIL No. 12: The Testimony of IRS-CI SA Stefan George Should Be Excluded Because His Proposed Testimony on Forfeiture Is Irrelevant and Prejudicial

This Court should also preclude IRS-CI Special Agent Stefan George from offering expert or summary witness testimony on his “analysis and tracing of cryptocurrency and fiat currency linked to the defendant through the Tornado Cash service or other businesses owned by the defendant.” (*See* Ex. 6 at 1.) Specifically, Agent George purports to trace various cryptocurrency transactions into the three specific assets named in the First Superseding Indictment: two homes owned by Mr. Storm and a 2022 Tesla. (Dkt. 109 ¶ 16). Agent George also purports to trace certain sales of the Tornado Cash developers’ allocation of TORN in June and August 2022, tracking the allegations in paragraphs 73 through 75 of the original Indictment.

As to tracing of cryptocurrency into the three specific assets, Agent George’s testimony should be precluded, first, because it has relevance, if at all, only to forfeiture proceedings which are not part of this trial. Second, his analysis does not remotely come close to supporting a forfeiture because his analysis shows that none of these assets was acquired with funds derived from or involved in any criminal activity at all, much less the alleged criminal acts for which Mr. Storm is being prosecuted. (*See* Ex. 6 ¶ 4.) Instead, Agent George’s analysis shows that the funds can be traced to cryptocurrency tokens that Mr. Storm: (1) earned from a completely separate business that he developed and operated; (2) received, along with many others, as an “airdrop” sent as a reward to all early users of Tornado Cash; or (3) withdrew from a Tornado Cash smart contract, when the protocol was completely legal to use. Agent George’s analysis is

thus irrelevant to any element of the charges, and is irrelevant to forfeiture (which would not be relevant at this stage of the case anyway), and should be excluded under Rule 402. It should also be excluded under Rule 403 because any probative value it may have is outweighed by the danger of unfair prejudice, as it would confuse the issues and mislead the jury with regard to the legality of using Tornado Cash prior to OFAC's imposition of (now-rescinded) sanctions on the protocol.

Agent George's proposed testimony regarding TORN sales in June and August 2022 also should be precluded, because such sales were neither proceeds nor profits of any alleged crime. The Tornado Cash smart contracts did not charge a fee; neither did any interface that the developers may have created to use it. (*See* MIL No. 5.)⁶ The government's theory of liability is that Mr. Storm is responsible for the illicit use of the Tornado Cash smart contracts and Peppersec's UI by bad actors, but there are literally no proceeds from such misuse, as the misused tools were free for anyone to use. *See Van Loon v. Dep't of the Treasury*, 122 F.4th 549, 558 (5th Cir. 2024) (noting the only fees are gas fees to the Ethereum blockchain and optional relayer fees). Mr. Storm also did not profit from any misuse. As explained in the concurrently filed related motions *in limine*, TORN was solely a governance token until April 2022, after which its value declined, so even if the government could prove any linkage between the Tornado Cash protocol and TORN after April 2022, it resulted in no profit to Mr. Storm.

Finally, there is no basis to admit any of the proposed testimony under Rule 404(b), as the government has not sufficiently demonstrated how Agent George's testimony addresses Mr.

⁶ All citations to "MIL Nos." are references to specific motions *in limine* included in Mr. Storm's currently filed motions *in limine*.

Storm’s alleged motive, opportunity, intent, preparation, plan, knowledge, identity, and/or absence of mistake or accident with respect to the charges.

1. Agent George’s Proposed Testimony

Agent George intends to offer testimony related to his “tracing analysis” on the source of funds for Mr. Storm’s purchase of three specific assets: two pieces of real property located in Washington state and a 2022 Tesla automobile (the “Tesla”). (Ex. 6 ¶ 4.) Specifically, Agent George will testify that he “traced the flow of funds from the purchase of the subject properties back to, among other things, cryptocurrencies derived from TORN, Tornado Cash service withdrawals, and/or funds derived from Multisender.” (*Id.*) Based on his tracing analysis, Agent George intends to offer the following testimony with respect to the three properties identified:

- As to the first Washington house, Agent George will testify that 75% of the funds Mr. Storm used to purchase the property can be traced to “ETH withdrawn from the Tornado Cash service.” (*Id.* ¶ 6.)
- As to the second Washington house, Agent George will testify that 9% of the funds Mr. Storm used to purchase the property can be traced back to “early adopter TORN distributions, Multisender profits, and a withdrawal from the Tornado Cash service.” (*Id.* ¶ 5.)
- For the Tesla, Agent George will testify that “nearly 100%” of the funds Mr. Storm used to purchase the vehicle can be traced back to “TORN token distributions,” which his supporting materials clarify is a reference to TORN distributions to all early adopters, and “profits from Multisender.” (*Id.* ¶ 7.)

Put simply, the three sources of funds are the: (1) ETH that Mr. Storm received from a wholly separate business, Multisender; (2) ETH that Mr. Storm put through the Tornado Cash smart contracts; and (3) TORN tokens that Mr. Storm received for free as a user—not a developer—of Tornado Cash.

Agent George also intends to offer testimony regarding his tracing of certain transactions in June and August 2022 involving the sale of TORN tokens. (*Id.* ¶ 9.) Unlike the three assets

described above, the TORN sold in these transactions can be traced to the Tornado Cash developers' allocation of TORN, which was distributed pursuant to a three-year vesting schedule, as explained in the disclosures of defense expert Dr. Stephanie Hurder. (*See* Ex. 7 ¶ 23.) As detailed below, such TORN tokens are separate and distinct from any TORN sold in connection with the acquisition of the three assets above.

2. This Court Should Preclude Agent George's Proposed Tracing Testimony Regarding the Three Named Assets Under FRE 402 and FRE 403

Agent George's proposed testimony is irrelevant and should be excluded pursuant to Rule 402 because, at most, it would be relevant to the government's forfeiture allegation, but forfeiture is not properly before the jury at this phase of the trial. Further, even if such forfeiture evidence could have any relevance during this phase, none of the sources of funds he identifies—Multisender profits; TORN distributed to all early adopters; and Tornado Cash withdrawals—is related to, or was involved in, any criminal proceeds or acts for which Mr. Storm is being prosecuted.

(a) Forfeiture Evidence Is Not Relevant at This Phase of the Trial

Asset forfeiture issues are typically excluded from the government's case-in-chief and are addressed at a post-verdict hearing. The only possible relevance of the three assets is to the forfeiture charge in the First Superseding Indictment, which states, "as a result of committing the offenses, the defendant shall forfeit" the three assets. (Dkt. 105 ¶ 16.) But issues related to forfeiture must be dealt with at a hearing after a verdict or plea has been entered, pursuant to Rule 32. *See* Fed. R. Crim. P. 32.2(b)(1)(A) (referencing "Forfeiture Phase of the Trial" and providing that, "[a]s soon as practical *after* a verdict or finding of guilty, or *after* a plea of guilty or nolo contendere is accepted . . . the court must determine what property is subject to forfeiture under the applicable statute") (emphasis added). Accordingly, by the rule's own terms, the

evidence is not relevant unless and until a defendant has been convicted of committing the predicate offenses.

(b) Even If Forfeiture Evidence Had Any Place in this Trial, Agent George’s Proposed Testimony Shows That in Fact the Three Assets Are Not Proceeds of, or Involved in, Any Alleged Crime

The First Superseding Indictment alleges that the three assets identified above are forfeitable under 18 U.S.C. § 982(a)(1) (Dkt. 105 ¶ 16), which provides that the “court, in imposing [a] sentence on a person convicted of an offense in violation of [Sections 1956 or 1960], shall order that the person forfeit to the United States any property, real or personal, involved in such offense, or any property traceable to such property.” But the source of funds for the named assets do not come remotely close to supporting any theory of forfeiture. Agent George’s report traces three types of cryptocurrency into the named assets: (1) Ethereum that Mr. Storm earned from his unrelated business, Multisender; (2) Ethereum that Mr. Storm received from other unidentified sources but went through the Tornado Cash smart contracts; and (3) TORN that he received for free, as a result of his *use* of—not his development of—Tornado Cash as an early adopter. None of these sources of funds represent the proceeds of, or was involved in, any alleged criminal acts and, therefore, none of the assets that were acquired using these funds are subject to forfeiture. This evidence is thus irrelevant and should be precluded.

“The term ‘involved in’ refers to property that is itself being laundered, as well as property used to facilitate a money laundering offense.” *United States v. Approximately 250 Documents Containing the Forged Hand Writing of President John F. Kennedy & Others*, 2008 WL 4129814, at *3 (S.D.N.Y. Sept. 5, 2008) (finding that documents were not forfeitable property where they were not themselves being laundered “nor were they otherwise involved in, derived from, or used to facilitate a money laundering offense”); *see also United States v. Kenner*, 443 F. Supp. 3d 354, 372 (E.D.N.Y. 2020) (evaluating whether real property was

“involved” in the scheme and looking to whether the property was purchased with fraud proceeds, used in money laundering transactions, or used to facilitate the scheme by helping to conceal or disguise it); *see also United States v. Schlesinger*, 261 F. App’x 355, 361 (2d Cir. 2008) (forfeiture of real property appropriate where fraud proceeds were used to pay lease and taxes on real property). Property that “facilitates” a crime is property that helps conceal or disguise money laundering or other illicit transactions. *See United States v. Nicolo*, 597 F. Supp. 2d 342, 352 (W.D.N.Y. 2009) (“[F]acilitation under section 982(a)(1)’s ‘involved in’ clause is geared at the forfeitability of instrumentalities, including funds in some cases, that facilitate . . . the money-laundering transactions”) (internal quotations omitted); *Kenner*, 443 F. Supp. 3d at 372 (finding that certain property was not forfeitable because it was not used to facilitate the scheme by helping to conceal or disguise it).

Here, the government does not allege that the named assets were themselves laundered or were used to facilitate any money laundering offense. Instead, the government appears to be seeking forfeiture on the theory that the funds used to acquire these assets can be traced to criminal proceeds. For the reasons set forth below, that is simply not the case.

First, as Agent George concedes, Multisender is a “separate service” from Tornado Cash that Mr. Storm “developed, operates, and profits from.” (*Id.* ¶ 2.) The government does not allege that Multisender was connected to Tornado Cash or otherwise alleged to be an unlawful service. The funds derived from Multisender thus cannot represent the proceeds of any alleged criminal acts related to Tornado Cash, and Mr. Storm’s use of such funds cannot be relevant to any element of the offenses he is accused of.

Second, Agent George’s proposed testimony regarding “cryptocurrencies derived from TORN” refers to TORN tokens Mr. Storm received, along with many others, in an “airdrop”

distribution designed to reward early adopters of the protocol, as explained in the disclosures of defense expert Dr. Stephanie Hurder. (*See* Ex. 7 ¶ 27.) As Dr. Hurder explains, such “early adopter TORN distributions were available to all Tornado Cash users and are unrelated to the founders’ allocations of TORN tokens.” (*Id.*) Such TORN tokens are also separate and distinct from Mr. Storm’s founders’ allocation of TORN—the sales of which are the only basis for the government’s theory that Mr. Storm profited from his alleged conduct. (*See id.* ¶¶ 24, 27; *see also* Indictment, Dkt. 1 ¶¶ 73, 75).) Indeed, Agent George separately traces a portion of the developers’ allocation of TORN in paragraph 9, further demonstrating that what Agent George refers to as “cryptocurrencies derived from TORN” are not related to Mr. Storms’ founders’ allocation of TORN and thus cannot be characterized as representing any proceeds or profits from Mr. Storm’s development of Tornado Cash.⁷ They are thus irrelevant.

Third, Agent George’s proposed testimony regarding “Tornado Cash service withdrawals” is irrelevant because his tracing analysis merely shows that in each instance, Mr. Storm withdrew ETH from a Tornado Cash pool smart contract—nothing more. Agent George intends to testify that funds used to purchase the two Washington houses could be traced back to such withdrawals from the Tornado Cash service. (Ex. 6 ¶¶ 5, 6.) For the first Washington house, Agent George’s supporting materials indicate that the withdrawals from the Tornado Cash smart contract (accessible to anyone) took place on November 19, 2020. (*See id.* at 1.) For the

⁷ The government argued in opposing Mr. Storms’ motion to dismiss that “fees charged by relayers were a key engine by which the defendant and his co-conspirators expected to profit from this business” but also conceded that *all* “holders of the [TORN] tokens, *including* the founders,” were entitled to share in any fees paid by third-party relayers, the use of which was optional. (*See* Dkt. 53 at 6, 36 (emphasis added).) Because *all* holders of TORN were entitled to a portion of the fees paid by third-party relayers, such TORN derived from relayer fees cannot be evidence that Tornado Cash was an “enterprise that is carried on for profit or financial gain.” *United States v. Banki*, 685 F.3d 99, 114 (2d Cir. 2011).

second Washington house, the withdrawals from Tornado Cash smart contracts (also accessible to anyone) all took place on March 30, 2021. (*Id.*) The Tornado Cash smart contracts were not subject to any sanctions until OFAC's designation on August 8, 2022.⁸ The government concedes that the use of cryptocurrency mixing services is itself not illegal. (*See* Dkt. 53 at 31.)

In addition, Agent George's supporting materials indicate that such withdrawals were made in ETH and were therefore unrelated to Mr. Storms' developers' allocation of TORN. (*See* Ex. 8 at 1.) In other words, Agent George's tracing does not reveal anything other than the fact that Mr. Storm used and withdrew funds from the Tornado Cash smart contracts at a time when it was completely legal to do so.

Simply put, the government is not close to a viable theory of forfeiture as to these assets, and the assets are not relevant to any other issue in the indictment. In fact, Agent George's tracing only confirms that the assets come from sources of funds other than any tokens that Mr. Storm received as a result of his development of Tornado Cash. The fact that Mr. Storm may have acquired cryptocurrency assets from other activities and projects simply has no bearing on the issues to be determined at trial, and should be precluded.

(c) This Court Should Preclude Testimony Regarding the Three Assets Because Any Evidence Is More Prejudicial than Probative

Even if Agent George's proposed tracing analysis regarding the three properties was relevant, he should nevertheless should be precluded from testifying because it would confuse the issues and mislead the jury.

⁸ *See* Press Release, U.S. Department of Treasury, *U.S. Treasury Sanctions Notorious Virtual Currency Mixer Tornado Cash* (Aug. 8, 2022), <https://home.treasury.gov/news/press-releases/jy0916>. Notably, the sanctions were ruled unlawful and ultra vires and it is fully lawful to use the Tornado Cash smart contracts today.

Permitting Agent George to testify about his tracing of the funds used to acquire the three properties would mislead the jury into believing that Mr. Storm's actions in acquiring the funds were illegal or otherwise demonstrate illicit intent. With regard to withdrawals from Tornado Cash, as explained above, interacting with the Tornado Cash smart contracts was not illegal at the time of Mr. Storm's withdrawals in November 2020 and March 2021. Neither the government nor Agent George intend to offer any evidence that the withdrawals from the Tornado Cash smart contracts were tied to illicit activity. Permitting Agent George to testify that the source of funds for Mr. Storm's purchases came from Tornado Cash withdrawals would suggest otherwise, confusing the issues and misleading the jury into believing that Mr. Storm's mere use of the protocol indicates illicit intent.

Similarly, with regard to profits derived from Multisender, Agent George concedes that Multisender is a completely separate business, and there is no allegation that it is in any way connected to Tornado Cash aside from the fact that Mr. Storm worked as a developer on both protocols. Agent George's testimony would confuse the issues and mislead the jury into believing that Multisender is related to Tornado Cash or otherwise evinces, in some way, Mr. Storm's illicit intent.

Finally, with regard to "cryptocurrencies derived from TORN," as explained above, this category of funds refers to TORN that Mr. Storm received in an airdrop distribution meant to reward all early users of the Tornado Cash protocol and has nothing to do with his founders' allocation of TORN. Agent George's proposed testimony would confuse the issues by suggesting that the TORN Mr. Storm used to fund his purchases were earned in his role as a developer of the Tornado Cash protocol rather than in his capacity as a mere user of the

protocol.⁹ The effect would be prejudicial to Mr. Storm without any countervailing probative value, and this Court should thus preclude such testimony under Rule 403.

Because the probative value of Agent George's testimony regarding Mr. Storm's source of funds for the purchases of the assets at issue is outweighed by the risk of prejudice to Mr. Storm, and because the proposed relevance is weak at best, this Court should exclude Agent George's anticipated testimony pursuant to Rule 403.

3. Agent George's Proposed Testimony Regarding the June and August 2022 TORN Sales Should Be Precluded Because Such Sales Are Not Proceeds or Profits of Any Alleged Crime

This Court should also preclude Agent George from offering testimony regarding his tracing of certain alleged sales of TORN that took place in June and August 2022. (Ex. 6 ¶ 9.) As set forth in the defense's motion *in limine* seeking to preclude the government from introducing any evidence of Mr. Storm's alleged sales of TORN (MIL No. 5), whose arguments are incorporated herein by reference, such sales do not represent the proceeds or profits of any alleged crime and are thus irrelevant under Rule 402 and more prejudicial than probative under Rule 403. Whether Mr. Storm profited from his development of the Tornado Cash project—whether in the form of TORN sales or otherwise—is not an element of either the money laundering or IEEPA charges and any purported sales of TORN are therefore irrelevant to those charges. Even as to the Section 1960 charge, the key issue in determining whether Tornado Cash was a money transmitting business is whether it was a business that transmitted or transferred funds *for a fee*, and Mr. Storm's sales of TORN are irrelevant to that question for all the reasons

⁹ As noted above, any fees paid by relayers in TORN are also irrelevant because, as the government concedes, *all* holders of TORN tokens were entitled to share in any fees paid by relayers. (See Dkt. 53 at 36.)

set forth in MIL No. 5. This Court should thus preclude Agent George from testifying regarding his tracing of any alleged sales of TORN by Mr. Storm in June and August 2022.

4. There Is No Basis to Admit Any of Agent George's Proposed Testimony Pursuant to Rule 404(b)

Finally, this Court should not permit the government to offer Agent George's proposed testimony under Rule 404(b). First, the government's Rule 404(b) Notice was inadequate. Pursuant to Rule 404(b), the government must provide reasonable notice of its intent to offer such evidence and "articulate in the notice the permitted purpose for which the prosecutor intends to offer the evidence and the reasoning that supports the purpose." *Id.* (b)(3)(A)-(B). Here, the government's 404(b) Notice states that the evidence reflected in George's Disclosure "is admissible as direct evidence of the crimes charged" and also "admissible pursuant to Rule 404(b) as proof of Storm's motive, opportunity, intent, preparation, plan, knowledge, identity, and/or absence of mistake or accident with respect to the charges in the above-referenced case." (*See* Ex. 9 at 1-2.) Such boilerplate language fails to articulate the purpose for which the government seeks to introduce the George Disclosure under Rule 404(b), much less the "reasoning that supports the purpose" that is required under the Rule.

In any event, Agent George's proposed tracing analysis does not in any way address Mr. Storm's "motive, opportunity, intent, preparation, plan, knowledge, identity, absence of mistake, or lack of accident," as is required under the Rule. Fed. R. Evid. 404(b)(2). None of the three sources of funding described in the George Disclosure relates in any way to Mr. Storm's motive, opportunity, intent, preparation, or any of the other factors listed in Rule 404(b) because, as discussed above, they are not illegal or in any way involved in any criminal activity. This Court should not permit the government to offer Agent George's testimony under Rule 404(b).

C. MIL No. 13: The Testimony of FBI Special Agent Joel DeCapua Should Be Limited to Non-Hearsay Matters, and Since There Are None, His Testimony Should be Excluded Entirely

The government has given notice that FBI Special Agent Joel DeCapua intends to testify as an “expert” regarding an array of topics ranging from the general operations of cryptocurrency exchanges (Ex. 10 ¶¶ 1, 2) to specific information regarding 31 separate “criminal exploits” he has connected to Tornado Cash and his summaries of that information (*id.* ¶¶ 3-8) to the flow of funds from the 0x098B716B8Aaf21512996dC57EB0615e2383E2f96 address to Tornado Cash (*id.* ¶¶ 8). The reality, however, is that Agent DeCapua will not be testifying as an expert but as a summary fact witness. His experience and credentials are typical of FBI cyber and white collar agents—trained in tracing assets. To the extent he has any expertise, it is not in North Korean hacking, so he has no basis to testify about it as an expert at all. But much of what the government is proposing Agent DeCapua testify to is admittedly based on hearsay from blogs, Medium posts, statements of DeFi protocols, alleged hacking victims, and other similar hearsay sources.

While a properly qualified expert can permissibly rely upon hearsay, here, Agent DeCapua is not a properly qualified expert. His proffered testimony strays beyond the proper bounds of his qualifications and the limits of expert testimony, which will serve as no more than a conduit for transmitting hearsay to the jury. As such, his testimony, at least as to paragraphs 3 through 8 of his disclosure, violates Federal Rules of Evidence 702 and 703, and the Confrontation Clause.

1. Agent DeCapua’s Proffered Testimony Violates Controlling Second Circuit Authority

The Second Circuit has recognized precisely the problem presented when law enforcement fact witnesses masquerade as expert witnesses. In *United States v. Mejia*, the

Second Circuit recounted the history and development of the “officer expert” in criminal cases and then identified three persistent problems that have surfaced with respect to the false designation of law enforcement officers as “experts”: (1) exceeding the proper scope of expert testimony; (2) violation of the rule against hearsay; and (3) violation of the Confrontation Clause under *Crawford*. 545 F.3d 179, 186-202 (2d Cir. 2008). The Second Circuit, while recognizing the need for some types of officer expert testimony, warned:

An increasingly thinning line separates the legitimate use of an officer expert to translate esoteric terminology or to explicate an organization’s hierarchical structure from the illegitimate and impermissible substitution of expert opinion for factual evidence. If the officer expert strays beyond the bounds of appropriately “expert” matters, that officer becomes, rather than a sociologist describing the inner workings of a closed community, a chronicler of the recent past whose pronouncements on elements of the charged offense serve as shortcuts to proving guilt.

Id. at 190. Where an officer testifies to factual evidence and not expert opinion, the testimony is “more like a summary of the facts than an aide in understanding them.” *Id.* When so-called “officer experts” “come to court and simply disgorge their factual knowledge to the jury, the experts are no longer aiding the jury in its factfinding; they are instructing the jury on the existence of the facts needed to satisfy the elements of the charged offense.” *Id.* at 191.

Mejia relied on several earlier Second Circuit opinions where it had identified law enforcement fact witnesses testifying in the guise of expert witnesses. In *United States v. Dukagjini*, the Second Circuit found error when the case agent, a DEA agent, testified as an expert but “stray[ed] from his proper expert function” by “act[ing] at times as a summary prosecution witness.” 326 F.3d 45, 55 (2d Cir. 2003). The Second Circuit found that in doing so, he violated the rules governing expert witnesses, the hearsay rules, and the Confrontation Clause. *Id.* at 55, 58-59; *see also Mejia*, 545 F.3d at 192-93 (discussing *Dukagjini*). And in

United States v. Lombardozzi, the Second Circuit observed that, while any unpreserved Confrontation Clause error did not affect the defendant’s substantial rights, an organized crime expert may have impermissibly “communicated out-of-court testimonial statements of cooperating witnesses and confidential informants directly to the jury in the guise of an expert opinion.” 491 F.3d 61, 72 (2d Cir. 2007); *see also Mejia*, 545 F.3d at 193 (discussing *Lombardozzi*).

Here, the government’s proposed testimony by FBI agent DeCapua is similarly nothing more than summary fact testimony in the “guise of an expert opinion.” His proposed testimony presents exactly the problems identified in *Mejia*.

2. The Proffered Testimony of Agent DeCapua Violates the Rules Governing Expert Witnesses

Federal Rule of Evidence 702 requires that expert testimony concern “scientific, technical, or other specialized knowledge.” “A district court may commit manifest error by admitting expert testimony where the evidence impermissibly mirrors the testimony offered by fact witnesses, or the subject matter of the expert’s testimony is not beyond the ken of the average juror.” *United States v. Amuso*, 21 F.3d 1251, 1263 (2d Cir. 1994).

In *Mejia*, the Second Circuit held that the police officer’s testimony that the MS-13 gang had committed 18 to 23 murders went beyond the scope of proper expert testimony. The Second Circuit explained that, if the government was going to rely on the murders to support its RICO charge, then the fact “that an individual was murdered remains a *fact* that must be proven by competent *evidence*.” *Mejia*, 545 F.3d at 195. “The government cannot take a shortcut around its obligation to prove murder beyond a reasonable doubt just by having an expert pronounce that unspecified deaths of eighteen to twenty-three persons have been homicides committed by members of MS-13.” *Id.* at 195-96. The Second Circuit concluded that “[t]hose parts of [the

officer's] testimony that involved purely factual matters, as well as those in which [the officer] simply summarized the results of the Task Force investigation, fell far beyond the proper bounds of expert testimony.” *Id.* at 196. The Second Circuit noted the admonition in *Dukagjini* that agents testifying as experts gain ““unmerited credibility when testifying about factual matters from first-hand knowledge”” and held that it was error to allow the officer “to testify beyond the bounds for which expert testimony would have assisted the jury in understanding the evidence.” *Id.* (quoting *Dukagjini*, 326 F.3d at 53).

Similarly, here, the proffered testimony of Agent DeCapua will go far beyond those bounds. Much of the testimony he is expected to give is not “expert” testimony at all, but rather a summary of facts the government wants to prove. In particular, he is expected to testify regarding “31 separate criminal exploits,” his tracing of proceeds to Tornado Cash, a “summary of the inflows and outflows” to and from the Tornado Cash ETH pools, and the “flow of funds” from the suspect Ethereum address to Tornado Cash pools. (Ex. 10 ¶¶ 3-8.) He has no expertise in these matters, and his testimony can only be viewed as fact testimony, not expert testimony. While the workings of cryptocurrency exchanges may be the proper subject of expert testimony, Agent DeCapua’s testimony goes far beyond that and into a summary of facts specific to this case “in the guise of expert opinion.” *Lombardozzi*, 491 F.3d at 72. As in *Mejia* and *Dukagjini*, Agent DeCapua’s testimony regarding hacking, tracing, and the “flow of funds” is not the proper subject of expert testimony and should be excluded.

3. The Proffered Testimony Will Impermissibly Rely Upon and Convey Hearsay

Because Agent DeCapua is not in fact testifying as an expert, he may not testify based on hearsay. Federal Rule of Evidence 703 allows for the use of hearsay by *experts*, but that rule does not apply where, as here, a witness is not testifying as an expert but is testifying as a fact

witness. Fact witnesses' testimony is governed by the traditional rule against hearsay embodied in Federal Rule of Evidence 802.

Moreover, even to the extent experts may rely upon hearsay in forming their opinions, they "may not ... simply transmit that hearsay to the jury." *Mejia*, 545 F.3d at 197. "Instead, the expert must form his own opinions by 'applying his extensive experience and a reliable methodology' to the inadmissible materials. Otherwise, the expert is simply 'repeating hearsay evidence without applying any expertise whatsoever,' a practice that allows the Government 'to circumvent the rules prohibiting hearsay.'" *Id.* (quoting *Dukagjini*, 326 F.3d at 58-59). In *Mejia*, the officer expert testified about information he had learned from articles, reports from law enforcement personnel, interviews of gang members, and "research on the Internet." *Id.* The Second Circuit concluded that "at least some of his testimony involved merely repeating information he had read or heard [The officer] did not analyze his source materials so much as repeat their contents." *Id.* at 197-98. The Second Circuit concluded that these statements violated Rule 703.

The proffered testimony of Agent DeCapua does the same. The government's disclosure makes no secret of the fact that Agent DeCapua will repeat hearsay. It specifically notes that the information he plans to testify about comes from "public statements released by the victims describing the nature of the exploit, or in the case of the two rug pull incidents, reviewed public reporting, victim complaints, and an archived version of the now-deleted website that was used to advertise one of the rug pull scams." (Ex. 10 at ¶ 4.) Other than compiling this information into various spreadsheets and summarizing the 31 "criminal exploits" in a single document, he has performed no independent analysis that would qualify as expert opinion. Like the police officer in *Mejia*, Agent DeCapua intends to simply repeat the contents of information he

discovered from various news articles, blog posts, and posts on X—all of which constitutes inadmissible hearsay—so that the government may take a shortcut around its obligation to prove that the funds Agent DeCapua traced involved the proceeds of criminal activity. Agent DeCapua’s proffered testimony therefore is a prime example of the government circumventing the rules against hearsay, and it should be excluded for this reason as well.

4. The Proffered Testimony Violates the Confrontation Clause Under *Crawford*

Finally, as in *Mejia*, at least some of Agent DeCapua’s testimony would violate the Confrontation Clause as laid out in *Crawford v. Washington*, 541 U.S. 36 (2004). In *Mejia*, the Second Circuit explained that, to the extent the expert is simply conveying out-of-court testimonial statements to the jury, the expert testimony also violates *Crawford*. *Mejia*, 545 F.3d at 198. Here, Agent DeCapua will offer testimony and summaries regarding victim statements concerning alleged crimes, which under the circumstances presented here violate *Crawford*.

The Supreme Court has defined testimonial statements under *Crawford* to include victim statements made to law enforcement when “the primary purpose of the interrogation is to establish or prove past events potentially relevant to later criminal prosecution.” *Davis v. Washington*, 547 U.S. 813, 822 (2006). The Supreme Court in *Davis* distinguished statements by victims of crime that are made with the primary purpose of responding to an ongoing emergency as nontestimonial, from statements not made in ongoing emergency, and are instead aimed at providing facts for a prosecution, as testimonial. *See id.* at 823-32 (911 call regarding ongoing domestic violence was not testimonial, while in companion case, interview with police after incident of domestic violence had occurred was testimonial); *see also Michigan v. Bryant*, 562 U.S. 344, 358–59 (2011) (dying victim’s statements to officers to help identify assailant not testimonial). While testimonial statements have generally been statements made to law

enforcement, the Supreme Court has declined to “to adopt a categorical rule excluding [statements made to individuals other than law enforcement] from the Sixth Amendment’s reach.” *Ohio v. Clark*, 576 U.S. 237, 246 (2015) (three-year-old victim’s statements to preschool teachers assessing immediate risk of abuse not testimonial, but not ruling out as testimonial other non-emergency statements made to non-law enforcement personnel).

Here, it is not entirely clear precisely which of the many statements Agent DeCapua identified in his supporting materials the government will rely upon and introduce at trial, but it is clear that most, if not all, of them are victim statements of some sort. Agent DeCapua’s disclosure states he: “[u]s[ed] reports from victims and other public reports of criminal exploits” and “reviewed documentation of the incidents that was sent by the victims or by law enforcement.” (Ex. 10 at 2.) Among the materials produced in support of Agent DeCapua’s disclosure is a document entitled “Tornado Cash OneNote.pdf,” in which Agent DeCapua summarizes the 31 “criminal exploits” and includes screenshots of public statements by the various cryptocurrency exchanges and protocols announcing that they had been hacked.¹⁰ (*See, e.g.*, Ex. 11 at 1 (“On September 25, 2020, KuCoin announced on their website that they were hacked: [screenshot].”).)

In this case, given the nature of the crimes, these victims clearly were not reporting “emergencies” that would subject them to the emergency exception identified in *Davis*, *Bryant*, and *Clark*. It also appears that at least some statements were made either to Agent DeCapua himself or to other law enforcement, as Agent DeCapua says he reviewed documentation sent by victims or by law enforcement. Even those victim statements that were not made to law

¹⁰ An excerpt of this document is attached as Exhibit 11. Exhibit 11 includes the opening pages of Agent DeCapua’s analysis for each hack, where he identifies the public statement announcing an exploit or hack.

enforcement but rather placed into the public sphere directly by victims should be deemed testimonial here. The primary purpose of the statements had to be to prove past facts that would be potentially relevant in later criminal prosecutions. (*See, e.g.*, Ex. 11 at 20 (“On March 29, 2022, Ronin announced on their blog roninchain.com/blog that Ronin bridge had been hacked for 173,600 ETH and 25,500,000 USDC” and including a screenshot of the blog post announcing, “We are in the process of conducting a thorough investigation.”) Under the standards articulated by the Supreme Court, all of the victim statements, and Agent DeCapua’s summaries of them, run afoul of *Crawford*.

For all the foregoing reasons, Agent DeCapua’s proffered testimony in paragraphs 3 through 8 of the government’s disclosure should be excluded under the rules regarding expert testimony, the rules against hearsay, and the Confrontation Clause.

D. MIL No. 14: This Court Should Exclude the Testimony of John Pisa-Relli and Any Other Government Witnesses Who Are “Lay Witnesses” Improperly Offering Expert Opinions.

The government disclosed it intends to call at trial a Department of Treasury witness nominally as a lay witness: John Pisa-Relli, Senior Law Enforcement Coordinator, OFAC. Based on the government’s disclosures, the defense is concerned that this proposed lay witness will offer expert opinions disguised as lay opinions. Indeed, the defense expects Pisa-Relli’s intended testimony will not satisfy the requirements for lay witness opinion testimony under Rule 701 because his testimony will not be based on personal perception, will be unhelpful to the jury, and will rely on specialized knowledge. Even if his testimony is admissible under Rule 701, this Court should separately preclude it under Rule 403, because its negligible probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, or presenting cumulative evidence. Finally, the defense is willing to stipulate to the fact that U.S.

sanctions were in place on April 14, 2022, which obviates the need for any testimony from Pisa-Relli.

1. The Proffered Testimony of the OFAC Witness and the Defense Objections

In the February 18, 2025 letter, the government disclosed that it intended to call Pisa-Relli to offer testimony regarding (1) “OFAC’s administration of United States sanctions on specially designated nationals”; (2) OFAC’s designation of the Lazarus group as an SDN; (3) OFAC’s identification of “an ETH wallet address beginning with the characters 0x098B716, which was used by the Lazarus Group” as blocked property; and (4) that “Roman Storm, Roman Semenov, Alexey Pertsev, Tornado Cash, and Peppersec” are individuals and entities which did not obtain licenses to conduct any transactions with or services for the Lazarus Group. (*See* Ex. 12 at 3.)¹¹

The government did not provide a detailed expert witness disclosure for Pisa-Relli, claiming that he would not be offering expert opinions and therefore that more detailed disclosures were not required. (*Id.*) The government, however, invited the defense to let the government know if it disagreed with this assessment and believed further disclosures were required. (*Id.*)

In response, on February 28 2025, the defense sent a letter to the government, stating that it believed that Pisa-Relli would be testifying as an expert and that further disclosure about his testimony was therefore required. (*See* Ex. 13.) The government responded in a March 10, 2025 letter, stating that further disclosures were not necessary because Pisa-Relli would not be offering “opinions,” whether lay or expert. (*See* Ex. 14.) Significantly, the government did not

¹¹ The government’s letter also disclosed it intended to call a witness from FinCEN; however, it has now notified this Court and the defense that it no longer intends to call a witness from FinCEN.

respond to defendant's objection that his testimony would impermissibly address the law, nor did it make any claim that Pisa-Relli would not be testifying based on his specialized knowledge of OFAC regulations. (*Id.*)

2. The OFAC Witness's Proffered Testimony Should Be Excluded as Improper Lay Opinion Testimony Under Rule 701

Pisa-Relli does not meet the requirement for a lay witness under Rule 701. The Federal Rules of Evidence authorize a trial court to permit a witness to testify to admissible evidence in the form of an opinion pursuant to Rule 701 or 702. Rule 702 permits testimony from an expert, *i.e.*, one who has "scientific, technical, or other specialized knowledge" based on his "knowledge, skill, experience, training, or education." Rule 701 provides that "[i]f a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is: (a) rationally based on the witness' perception; (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; *and* (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702."

Based on the government's disclosure, Pisa-Relli's testimony will fail to satisfy the three separate elements for admitting lay opinion testimony, due to his lack of personal involvement in, or experience investigating, the particular factual allegations at issue, the lack of helpfulness of his testimony, and his likely reliance on his specialized knowledge.

First, Pisa-Relli should be precluded from offering lay opinion testimony because the government cannot elicit lay opinions from a law enforcement official or regulator who "goes beyond his personal perceptions to the inferences and conclusions he drew from his after-the-fact observation." *Leon v. TransAm Trucking, Inc.*, 2020 WL 728785, at *3 (S.D.N.Y. Feb. 13, 2020); *see also Garcia*, 413 F.3d at 212-13 (holding that a law enforcement agent's lay opinion testimony is inadmissible where it relies on "information gathered in an investigation" by

someone other than the witness, because the witness “is not presenting the jury with the unique insights of an eyewitness’s personal perceptions”).

Second, Pisa-Relli’s testimony will not be helpful to the jury “to clearly understand[] the witness’s testimony or to determin[e] a fact in issue” as required by Rule 701(b). To the contrary, as discussed above, the proffered objectionable testimony will relate to legal issues, not factual ones. It is not helpful to the jury to hear testimony regarding the law, when it is the judge, not witnesses, who must instruct the jury as to the law.

Finally, it is clear that Pisa-Relli would be testifying based on his specialized knowledge of his respective agency, OFAC. In *Bank of China*, the Second Circuit explained testimony that “reflected specialized knowledge . . . because of [lay witness’s] extensive experience in international banking” and “not a product of his investigation” is impermissible lay opinion under Rule 701(c). 359 F.3d at 182. Here, the witness’s opinions will not be the product of their own investigation—it instead will reflect their knowledge of OFAC’s regulations, which falls into the ambit of his specialized knowledge, and the government tellingly did not contend otherwise in its communication with the defense. Indeed, the only possible reason to offer testimony regarding OFAC regulations and administration is because such matters are beyond the jurors’ common knowledge. That is the stuff of expert testimony, not lay opinion testimony. *See Natal*, 849 F.3d at 536.

In sum, the defense moves this Court to restrict the government from eliciting opinion testimony from lay witnesses, namely, Pisa-Relli, that strays into areas that are (1) outside his personal knowledge, (2) unhelpful to the jury, or (3) otherwise reserved for experts qualified under Rule 702.

3. The Proffered Testimony Should Be Excluded Pursuant to Rule 403

The proposed testimony of Pisa-Relli also violates Rule 403. In all events, the proffered testimony has minimal probative value that is substantially outweighed by confusion, cumulativeness, and unfair prejudice. *See* Fed. R. Evid. 403; *see also United States v. Bradley*, 2022 WL 1708400, at *3-4 (D. Conn. May 27, 2022) (excluding lay witness testimony concerning the results of the election committee’s investigation because “it strongly implies that [the committee] determined that [the defendant] violated state election law” and therefore created a “substantial risk that a jury will be misled as to the appropriate standard”); *Dukagjini*, 326 F.3d at 53-54 (describing juror confusion caused when experts “stray[] from the scope of expertise” as “juror[s] understandably will find it difficult to navigate the tangled thicket of expert and factual testimony from the single witness”). This is especially true because the defense is willing to stipulate to certain facts to which Pisa-Relli intends to testify.

For all the foregoing reasons, this Court should exclude the proffered testimony from Pisa-Relli to the extent he will go beyond the purely factual matters to which Mr. Storm is willing to stipulate.

IV. CONCLUSION

For the foregoing reasons, Mr. Storm respectfully requests that this Court grant these motions *in limine*.

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Respectfully submitted,

By: /s/ Brian E. Klein

Brian E. Klein
Keri Curtis Axel
Becky S. James
Kevin M. Casey
Viviana Andazola Marquez
Waymaker LLP

-and-

David E. Patton
Nicholas D. Pavlis
Hecker Fink LLP

Attorneys for Roman Storm